

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Spencer *et al.*

Application No. 10/760,123

Filed: January 16, 2004

Confirmation No. 7284

For: COMPOSITIONS AND METHODS FOR
TISSUE SPECIFIC TARGETING OF
LENTIVIRUS VECTORS

Examiner: Sumesh Kaushal

Art Unit: 1636

Attorney Reference No. 7158-71260-03

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney or Agent
for Applicant(s)

Debra A. Gordon

Date Mailed August 19, 2005

TRANSMITTAL LETTER

Enclosed for filing in the application referenced above are the following:

- ☒ Information Disclosure Statement.
- ☒ Form 1449 and copies of references cited thereon (24).

The Director is hereby authorized to charge any fees that may be required in connection with this filing to Deposit Account No. 02-4550. A copy of this sheet is enclosed.

Please return the enclosed postcard to confirm that the items listed above have been received.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

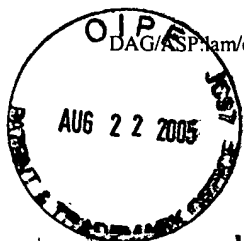
One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446

cc: Docketing

By

Debra A. Gordon

Debra A. Gordon, Ph.D.
Registration No. 54,128



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Spencer *et al.*

Application No. 10/760,123

Filed: January 16, 2004

Confirmation No. 7284

For: COMPOSITIONS AND METHODS FOR
TISSUE SPECIFIC TARGETING OF
LENTIVIRUS VECTORS

Examiner: Sumesh Kaushal

Art Unit: 1636

Attorney Reference No. 7158-71260-03

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 on the date shown below.

Attorney or Agent
for Applicant(s)

Debra A. Gordon

Date Mailed August 19, 2005

INFORMATION DISCLOSURE STATEMENT
PURSUANT TO 37 C.F.R. § 1.97(b)(3)

COMMISSIONER FOR PATENTS
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450

Listed on the accompanying form PTO-1449 and enclosed herewith are several English-language documents. Applicants respectfully request that these documents be listed as references cited on the issued patent.

Applicants filed this Information Disclosure Statement ("IDS") before the mailing date of a first Office action on the merits. As a result, no fee should be required to file this IDS. However, if the Patent Office determines that a fee is required for Applicants to file this IDS, please charge any such fees to the deposit account referenced on the accompanying transmittal.

The filing of this IDS shall not be construed to be an admission that the information cited in the statement is, or is considered to be, prior art or otherwise material to patentability as defined in 37 C.F.R. §1.56.

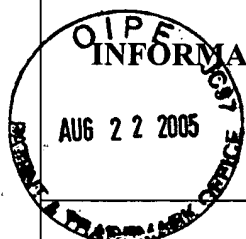
Respectfully submitted,

KLARQUIST SPARKMAN, LLP

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446

By Debra A. Gordon
Debra A. Gordon, Ph.D.
Registration No. 54,128

cc: Docketing



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	7158-71260-03
Application Number	10/760,123
Filing Date	January 16, 2004
First Named Inventor	Spencer
Art Unit	1636
Examiner Name	Sumesh Kaushal

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

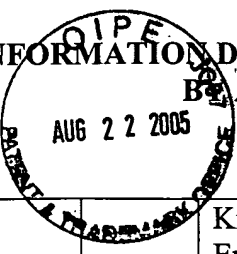
Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee

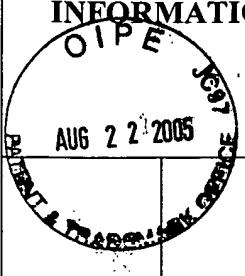
FOREIGN PATENT DOCUMENTS

Examiner's Initials*	Cite No. (optional)	Country	Number	Publication Date	Name of Applicant or Patentee

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
		Aldovini and Young, "Mutations of RNA and Protein Sequences Involved in Human Immunodeficiency Virus Type 1 Packaging Result in Production of Noninfectious Virus." <i>J. Virol.</i> , 64:1920-1926, 1990.
		Chan and Kim, "HIV Entry and Its Inhibition." <i>Cell</i> , 93:681-684, 1998.
		Dull <i>et al.</i> , "A Third-Generation Lentivirus Vector with a Conditional Packaging System." <i>J. Virol.</i> , 72:8463-8471, 1998.
		Feinberg <i>et al.</i> , "The role of Tat in the human immunodeficiency virus life cycle indicates a primary effect on transcriptional elongation." <i>Proc. Natl. Acad. Sci. USA</i> , 88:4045-4049, 1991.
		Finer <i>et al.</i> , " <i>kat</i> : A High-Efficiency Retroviral Transduction System for Primary Human T Lymphocytes." <i>Blood</i> , 83:43-50, 1994.
		Geigenmuller and Linial, "Specific Binding of Human Immunodeficiency virus Type 1 (HIV-1) Gag-Derived Proteins to a 5' HIV-1 Genomic RNA Sequence." <i>J. Virol.</i> , 70:667-671, 1996.

EXAMINER SIGNATURE:	DATE CONSIDERED:
<p>* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>	

	Attorney Docket Number	7158-71260-03
	Application Number	10/760,123
	Filing Date	January 16, 2004
	First Named Inventor	Spencer
	Art Unit	1636
	Examiner Name	Sumesh Kaushal
		Kim <i>et al.</i> , "A Short Sequence Upstream of the 5' Major Splice Site is Important for Encapsidation of HIV-1 Genomic RNA." <i>Virology</i> , 198:336-340, 1994.
		Lamb, "Paramyxovirus Fusion: A Hypothesis for Changes." <i>Virology</i> , 197:1-11, 1993.
		Leavitt <i>et al.</i> , "Human Immunodeficiency Virus Type 1 Integrase Mutants Retain In Vitro Integrase Activity yet Fail To Integrate Viral DNA Efficiently during Infection." <i>J. Virol.</i> , 70:721-728, 1996.
		Lin <i>et al.</i> , "Receptor-Specific Targeting Mediated by the Coexpression of a Targeted Murine Leukemia Virus Envelope Protein and a Binding-Defective Influenza Hemagglutinin Protein." <i>Hum. Gene Ther.</i> , 12:323-332, 2001.
		Lin and Cannon, "Use of pseudotype retroviral vectors to analyze the receptor-binding pocket of hemagglutinin from a pathogenic avian influenza A virus (H7 subtype)." <i>Virus Res.</i> , 83:43-56, 2002.
		Luban and Goff, "Mutational Analysis of <i>cis</i> -Acting Packaging Signals in Human Immunodeficiency Virus Type 1 RNA." <i>J. Virol.</i> , 68:3784-3793, 1994.
		McBride and Panganiban, "The Human Immunodeficiency Virus Type 1 Encapsidation Site Is a Multipartite RNA Element Composed of Functional Hairpin Structures." <i>J. Virol.</i> , 70:2963-2973, 1996.
		Miyoshi <i>et al.</i> , "Development of a Self-Inactivating Lentivirus Vector." <i>J. Virol.</i> , 72:8150-8157, 1998.
		Naldini <i>et al.</i> , "Efficient transfer, integration, and sustained long-term expression of the transgene in adult rat brains injected with a lentiviral vector." <i>Proc. Natl. Acad. Sci. USA</i> , 93:11382-11388, 1996.
		Naldini <i>et al.</i> , "In Vivo Gene Delivery and Stable Transduction of Nondividing Cells by a Lentiviral Vector." <i>Science</i> , 272:263-267, 1996.
EXAMINER SIGNATURE:	DATE CONSIDERED:	
<p>* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT 		Attorney Docket Number	7158-71260-03
		Application Number	10/760,123
		Filing Date	January 16, 2004
		First Named Inventor	Spencer
		Art Unit	1636
		Examiner Name	Sumesh Kaushal
		Ory <i>et al.</i> , "A stable human-derived packaging cell line for production of high titer retrovirus/vesicular stomatitis virus G pseudotypes." <i>Proc. Natl. Acad. Sci. USA</i> , 93:11400-11406, 1996.	
		Paillart <i>et al.</i> , "A loop-loop "kissing" complex is the essential part of the dimer linkage of genomic HIV-1 RNA." <i>Proc. Natl. Acad. Sci. USA</i> , 93:5572-5577, 1996.	
		Vicenzi <i>et al.</i> , "An Integration-Defective U5 Deletion Mutant of Human Immunodeficiency Virus Type 1 Reverts by Eliminating Additional Long Terminal Repeat Sequences." <i>J. Virol.</i> , 68:7879-7890, 1994.	
		Wyatt and Sodroski, "The HIV-1 Envelope Glycoproteins: Fusogens, Antigens, and Immunogens." <i>Science</i> , 280:1884-1888, 1998.	
		Zhang <i>et al.</i> , "Nascent Human Immunodeficiency Virus Type 1 Reverse Transcription Occurs within an Enveloped Particle." <i>J. Virol.</i> , 69:3675-3682, 1995.	
		Zhang <i>et al.</i> , "Endogenous Reverse Transcription of Human Immunodeficiency Virus Type 1 in Physiological Microenvironments: an Important Stage for Viral Infection of Nondividing Cells." <i>J. Virol.</i> , 70:2809-2824, 1996.	
		Zufferey <i>et al.</i> , "Self-Inactivating Lentivirus Vector for Safe and Efficient In Vivo Gene Delivery." <i>J. Virol.</i> , 72:9873-9880, 1998.	
		Zufferey <i>et al.</i> , "Multiply attenuated lentiviral vector achieves efficient gene delivery in vivo." <i>Nature Biotechnol.</i> , 15:871-875, 1997.	

EXAMINER SIGNATURE:	DATE CONSIDERED:
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	